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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,009	06/26/2001	Satchidanand Mishra	D/99021D	2624

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EXAMINER	
NGUYEN, THUKHANH T	
ART UNIT	PAPER NUMBER
1722	

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/892,009	MISHRA ET AL.	
	Examiner	Art Unit	
	Thu Khanh T. Nguyen	1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 December 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *10-13,15-20 and 22-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10-13, 15-20, 22-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 10-13, 15-20, and 22-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 claims an apparatus for treatment of a belt member and includes the steps of i.) heating the portion (of the belt) to the glass transition temperature and below the melting temperature, and then ii.) applying sufficient compression against the smooth flat surface of the support member to smooth out the seam. A single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph. In *Ex parte Lyell*, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 10, 12-13, 15-17, 22, 24, and 26-27 are again rejected under 35 U.S.C. 102(b) as being anticipated by Hoffman (3,956,045).

Hoffman teaches an apparatus and method for bonding different film layers, comprising a lower support member (18) having a smooth upper flat surface to receive and support a region of a flexible film (Fig. 2-3, 18), an upper heatable member (19) having a smooth heatable flat surface for compressing and heating a portion of the seam region (col. 6, lines 10-21).

In regard to claim 13, the heatable member (19) is a heating bar (Fig. 3, 19) for heat-compressing the film layers.

In regard to claims 15-17, 22 and 26-27, Hoffman further discloses that the heating means is embedded within the guide members (col. 2, lines 38-52), in which it could be a compression heating bar (18, 19, 120-127) or a rotatable compression wheel (128, 129), wherein the heatable flat surface comprises a low surface energy or anti-adhesive material, such as a thin Teflon layer (col. 10, lines 55-53), a fluorocarbon layer or a polymer layer (col. 4, lines 13-14).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 11, 20, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman ('045)

Hoffman disclose a film heat-sealing apparatus as described above, in which the heatable member having a Teflon coating layer, but fails to disclose that the heatable member is a strip

has a width of between about 6mm to about 30mm and the heating wheel having a Teflon coating layer.

In regard to claims 11 and 25, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Hoffman by varying the size of the heatable member in according to the size of the ribbon because if the heatable member is too big, it would waste energy to heat the unused portion, and it the heatable member is too small, it would not be enough to heat the entire cross-section of the ribbon. In Gardner v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

In regard to claim 20, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Hoffman by heating the material to a predetermined temperature in order to soften and to reshape the material. It is well settled that determination of optimum values of cause effective variables such as these process parameters is within the skill of one practicing in the art. *In re Boesch*, 205 USPQ 215 (CCPA 1980).

7. Claims 18-19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman ('045) as applied to claims 10, 12-13, 15-17 above, and further in view of Off et al (4,214,933).

Hoffman discloses an apparatus as disclosed above, but fails to disclose that the heating strip is electrically resistance and that the compression wheel is metal.

Off et al disclose an apparatus for depositing adhesive strips, comprising a compressing wheel (130) having a metal applicator (150) with an embedded heating band (152) made of electrical resistance material (col. 7, lines 51-64).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Hoffman by providing a metal compressing wheel having electrical resistance heating band as taught by Off et al, because the metal compression wheel would have higher thermal conductivity than composite material; thus, the films material would be heated faster.

Response to Arguments

8. Applicant's arguments filed 12/27/04 have been fully considered but they are not persuasive.

9. The Applicant has argued that Hoffman reference discloses a different method steps, in which the films material are first compressed, then heated to seal the films together. This method is different than that of the current invention, in which the material has already formed into a flexible belt is heated, then compressed.

First of all the current claimed invention is regard to an apparatus, which could be used by different methods. It has been held that when the claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly, 263 F.2d 844; 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device is, not what a device does." Hewlett- Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). (Emphasis in original) It has been held that a functional

limitation asserted to be critical for establishing novelty may, in fact, be an inherent characteristic of the prior art. The applicants is required to prove that the subject matter shown in the prior art does not necessarily possess the characteristics relied on. In re Schreiber, 128 F. 3d 1473, 1478, 44 USPQ 2d, 1432 (Fed. Cir. 1997); See also, In re Spada, 911 F 2d 705, 708, 15 USPQ 2d 1655, 1658 (Fed. Cir. 1977); In re Best, 562 F. 2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977); and Ex Parte Gray, 10 USPQ 2d 1922, 1925 (Bd. Pat. App. & Int. 1989).

In this case, Hoffman discloses an apparatus including all the structure limitations as claimed by the Application, and is capable of heating film material by a heating means, or the jaw members (18, 19), then compressing the films against the surface of the jaw members (col. 2, lines 64-69). This heated compressing process would inherently produce a smooth surface on the forming belt, for the plastic material would be melted during the compression. In regard to the heating temperature, it would inherent to one of ordinary skill in the art to select a proper temperature that is higher than the film glass transition temperature in order to heat-seal the film layers.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Khanh T. Nguyen whose telephone number is 571-272-1136. The examiner can normally be reached on Monday- Friday, 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin L. Utech can be reached on 571-272-1137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TN

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